

ALBANY SOUTH END COMMUNITY AIR QUALITY STUDY



Department of
Environmental
Conservation

South Pearl Street and Southern Boulevard

October 2019

What You Need to Know

- Pollutant emissions from traffic-related air pollution (TRAP) measured higher on South Pearl Street at the Ezra Prentice Homes than in a comparison neighborhood (Southern Boulevard) with similar traffic volume but a different mixture of vehicles.
- The types of vehicles releasing the most pollutants were found to be trucks and buses. South Pearl Street at the Ezra Prentice Homes has more of these types of vehicles than the comparison neighborhood with a similar amount of traffic.
- TRAP was higher on the east side of South Pearl Street at Ezra Prentice and gradually decreased away from the road.
- DEC and other agencies are taking steps to reduce TRAP as outdoor air affects indoor air concentrations.

Why is TRAP Higher at South Pearl Street?

South Pearl Street has more truck and bus traffic than Southern Boulevard (see figure 1).

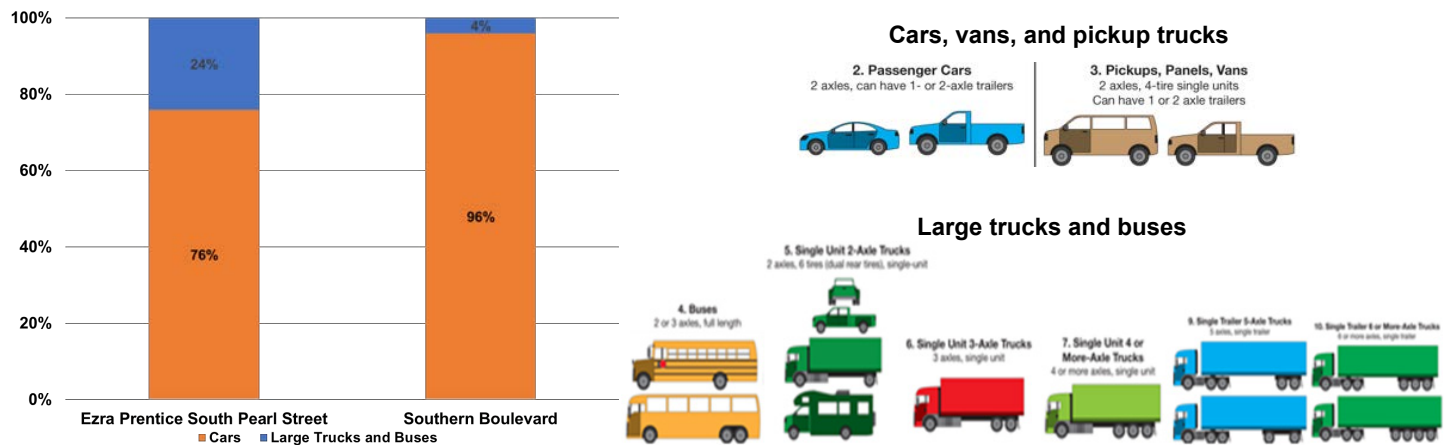


Figure 1. Vehicle Types on South Pearl St. (at Ezra Prentice) versus Southern Boulevard

TRAP Results at South Pearl Street and Southern Boulevard

Portable air monitors collected TRAP data for 5-hour periods on South Pearl Street at the Ezra Prentice Homes, and in a residential neighborhood across Southern Boulevard.

Portable monitors, placed at varying distances across both locations, measured ultrafine particles and black carbon as markers of traffic-related air pollution (TRAP) to better understand how pollution from traffic travels from the road into the neighborhoods.

Results showed that, on average, TRAP concentrations closest to South Pearl Street at Ezra Prentice were about twice the amount measured on Southern Boulevard. Concentrations also remained higher over longer distances from the road on South Pearl Street and measured higher on the river (east) side of South Pearl Street, gradually decreasing with distance from the road (see figure 2). In comparison, the TRAP concentrations at Southern Boulevard are lower next to the road, but also gradually decrease with distance from the road (see figure 3).



Figure 2. Ultrafine Particle Concentrations – South Pearl Street at Ezra Prentice



Figure 3. Ultrafine Particle Concentrations – Southern Boulevard

What are DEC and state and local partners doing to reduce TRAP exposures?

Reducing traffic pollution

- DEC is working with identified vehicle fleets to evaluate ways fleets can reduce emissions (removing or retrofitting specific high-emitting vehicles).
- DEC and DOT are making \$20 million available from the Volkswagen settlement and other resources to fund clean trucks statewide, with a focus on environmental justice communities like the South End. DEC has allocated an additional \$52.4 million for future projects to replace transit, school, and paratransit buses statewide.
- DEC continues to conduct periodic enforcement checks on South Pearl Street and impose fines on trucks and buses with high emissions.
- DOT has reclassified four roads within the Port of Albany. This change will make the routes within the port eligible for transportation grants.
- DOT is committed to providing technical support to the City of Albany, including direct engineering assistance, in support of the city's continued assessment of South Pearl Street and potential alternative routes for truck traffic.
- The City of Albany's Mayor's Office is helping to coordinate the voluntary rerouting of frequent truck traffic by several businesses in the South End, and has directed the Albany Department of General Services (DGS) to prohibit its vehicles from using South Pearl Street other than for regularly scheduled solid waste pickup and street cleaning. DGS will also purchase a street-cleaning vacuum (not a sweeper) to help reduce road dust.
- DEC, the Mayor's Office, and the Albany Housing Authority (AHA) are leading a workgroup to develop mitigation strategies and ensure implementation of overall approaches. The workgroup will evaluate the effectiveness of roadside barriers, such as green walls, where appropriate.

Reducing air pollutants indoors

- AHA is working to minimize residents' exposure to airborne pollutants by providing professionally installed window air conditioners at Ezra Prentice, beginning with residences closest to South Pearl Street and moving outward.
- AHA is also evaluating other strategies, such as the effectiveness of central air conditioning.
- AHA will conduct door-to-door advocacy with healthcare partners to increase awareness and education related to indoor air quality.

Where Can I Find More Information?

- Read the full Albany South End Air Quality Study at: <https://on.ny.gov/southendstudy>.

Next Steps

- DEC will evaluate the effectiveness of reduction strategies by continuing to monitor particulate matter and other TRAP in the Albany South End community.

CONTACT INFORMATION

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